

**Drug Abuse (including AIDS due to IV drug use)**  
Summary of Methods and Data for Estimate of Costs of Illness

- |  |                     |
|--|---------------------|
| 1. Estimated Total Economic Cost   | \$109.8 billion     |
| Estimated Direct Cost  | \$ 32.0 billion     |
| Estimated Indirect Cost  | \$ 77.6 billion     |
| Reference Year   | 1995                |
| IC Providing the Estimate  | NIDA                |
|  |                     |
| Direct Costs Include: Other related nonhealth costs  | Yes, \$20.0 billion |
| Indirect Costs Include:  |                     |
| Mortality costs  | Yes, \$16.2 billion |
| Morbidity costs: Lost workdays of the patient  | Yes                 |
| Morbidity costs: Reduced productivity of the patient   | Yes                 |
| Lost earnings of unpaid care givers  | No                  |
| Other related nonhealth costs  | Yes, \$43.8         |
| Interest Rate Used to Discount Out-Year Costs  | 8.6%                |
| 2. Category code(s) from the International Classification of Diseases, 9th Revision, Clinical Modification, (ICD-9-CM) for all diseases whose costs are included in this estimate: (See extended list of codes for drug abuse in item 10 below). |                     |
| 3. Estimate Includes Costs:  |                     |
| Of related conditions beyond primary, strictly coded ICD-9-CM category   | Yes                 |
| Attributable to the subject disease as a secondary diagnosis   | Yes                 |
| Of Conditions for which the subject disease is the underlying cause  | Yes                 |
| 4. Population Base for Cost Estimate (Total U.S. pop or other)   | Total U.S. pop.     |
| 5. Annual (prevalence model) or Lifetime (incidence model) Cost  | Annual              |
| 6. Perspective of Cost Estimate (Total society, Federal Budget, or other)  | Total Society       |
| 7. Approach to Estimation of Indirect Costs  | Human Capital       |

8. Source of Cost Estimates: (Reference published or unpublished report, or address and telephone of person/office responsible for estimate)

Harwood, H; Fountain, D; Livermore, G. The Economic Costs of Alcohol and Drug Abuse in the United States, 1992, HHS 98-4327. Report developed for the National Institute on Drug Abuse and the National Institute on Alcohol Abuse and Alcoholism, National Institutes of Health, USDHHS. Bethesda, MD: National Institutes of Health.

9. Other indicators of burden of disease:

Prevalence of drug dependence and/or addiction (1996): 13.0 million (est) (1996 National Household Survey on Drug Abuse, SAMHSA)

Death from drug induced causes in 1996 estimate: 26,272\*.

\*Estimate is extrapolated from the 1992, Harwood, et al. The Economic Costs of Alcohol and Drug Abuse in the United States and 1996 estimates for alcohol related deaths estimated by

NIAAA. This study reported 107,360 alcohol-attributable deaths and 25,493 drug-attributable deaths. The ratio of drug deaths to alcohol deaths is 0.237453. Applying this ratio to NIAAA's estimate of alcohol attributable deaths for 1996 (110,640) yields an estimate of drug-attributable deaths for 1996 of 26,272.

#### 10. Commentary:

The Lewin study found that the economic cost to society from drug abuse was an estimated \$97.7 billion in 1992. Since then, inflation and growth in the U.S. population have driven the economic impacts of drug abuse higher. Based on these two effects, the estimated total costs of drug abuse have been projected by Lewin to have increased by 12.5 percent between 1992 and 1995. The 1995 figures here reflect that projection.

There have been major changes in the nature of drug abuse problems in recent years since the 1985 study by Dorothy Rice and associates, the source of the previous estimate of costs of illness for drug abuse. According to recent studies, the prevalence of severe drug problems and their consequences have increased in the past ten years, notably from the epidemic of intensive/heavy cocaine use and from the increased spread of the HIV epidemic. Changes in prevalence have been associated with a material increase in drug costs. Although crime rates did not change substantially during this period, criminal justice expenditures more than doubled overall, even after adjustment for price increases. This can be attributed mainly to increases in the number of persons incarcerated. There has also been a major change in the organization and delivery of drug treatment and general health services, brought about by the influence of managed care and other changes in Medicaid, Medicare, and private insurance.

The balance of changes are due to new findings and/or methodology indicating larger impacts than previously estimated. One substantive change in the methodology has resulted in material increases in cost estimates: the inclusion of higher proportions of various health problems attributable to drug abuse and addiction.

Drug abuse disorders carry with them a number of specific, well-recognized sequelae. Among them are: health consequences and their impacts on the health care system; criminal behavior, either as a means of individual support, participation in the drug trade, or violence; and job loss, financial destitution, and subsequent reliance on society's safety nets.

Direct costs are health care expenditures (drug abuse services and care resulting from the medical consequences of use) and the costs of crime (the costs of criminal justice and drug interdiction). Indirect costs are the lost potential productivity attributed to drug abuse (premature death, institutionalization, and the consequences of being a victim of crime).

#### Extended List of ICD-9-CM Codes for Drug Abuse:

<u>Diagnosis</u>	<u>ICD-9-CM Code</u>
Drug psychoses	292
Drug dependence	304
Nondependent abuse of drugs	305.2-305.9

Polyneuropathy due to drugs	357.6
Narcotics affecting fetus or newborn via placenta or breast	760.72
Hallucinogens affecting fetus or newborn via placenta or breast	760.73
Drug withdrawal syndrome in newborn	779.5
Poisoning by opiates and related narcotics	965.0
Poisoning by sedatives and hypnotics	967
Poisoning by CNS muscle tone depressants	968.0
Poisoning by psychotropic agents	969
Poisoning by CNS stimulants	970
Accidental poisoning by drugs, medicaments, and biologicals	E850-858
Agricultural and horticultural chemical and pharmaceutical preparations other than plant foods and fertilizers	E863
Heroin, methadone, other opiates and related narcotics, and other drugs causing adverse effects in therapeutic use	E935.0-E935.2; E937-E940
Injury undetermined whether accidentally or purposely inflicted from poisoning by drugs, medicaments, and other	E980
Homicide and injury purposely inflicted by other persons (Age 15+)	E960-E969
Tuberculosis	010-018